

200210618

Abstract

Steam turbine and method for operating a steam turbine

A steam turbine (20) having a rotor (21) which is provided with a number of rotor blades (22) and, together with a number of guide vanes (24), is arranged inside a casing shell (30) formed from a number of casing segments is to be designed to be suitable for operation with relatively high steam parameters, i.e. in particular with a particularly high steam temperature and a particularly high steam pressure. For this purpose, according to the invention active cooling of the casing shell (30) is provided, at least one of the casing segments which form the casing shell being provided with a number of integrated cooling channels (29). When the steam turbine (20) is operating, therefore, the casing shell (30) is actively cooled with a cooling medium by the latter being supplied to the cooling channels (29).

FIG. 2